

CLAIMS:

1. A method of recording a video stream, comprising the steps of
 - receiving a video stream (10);
 - generating a trickplay stream (11, 15) from the video stream, by selecting and arranging data from the video stream (10), the trick play stream (11, 15), when played at normal rate, representing the video stream at a trickplay rate;
 - 5 - storing the trickplay stream (11, 15) and a normal play stream (10) corresponding to the video stream (10) as separately accessible files on at least one randomly accessible storage device (4); and
 - providing linking information (12), which links positions of content within the normal play stream (10) to positions of corresponding content within the trickplay stream (11, 15).
 - 10
2. A method of replaying a video stream, comprising the steps of
 - providing a randomly accessible storage device (4) in which a normal play stream (10) and a trickplay stream (11, 15) are stored as separately accessible files, the trickplay stream (11, 15) when played at normal rate representing the normal play stream (10) data at a trickplay rate;
 - 15 - providing linking information (12), which links positions of content within the file for the normal play stream (10) to positions of corresponding content in the file for the trickplay stream (11, 15);
 - 20 - replaying a part of a play stream (10, 11, 15) from one of the files in the at least one randomly accessible storage device (4);
 - receiving a switch signal during replay of the part of the play stream (10, 11, 15), the switch signal for selecting a new play mode;
 - 25 - reading the linking information (12);
 - determining a first position in the file for the new play mode, the first position corresponding, according to the linking information (12), to a second position in the part of the play stream (10, 11, 15) that is replayed substantially at the time on which the switch signal is received;

- continuing replay with new play stream data from the file corresponding to the new play mode, starting with data determined by the first position.

3. A method of replaying according to Claim 2, wherein the normal stream and the trick play stream contain program clock references (PCR) for defining progress of time during play of the normal stream (10) and the trick play stream (11, 15) defined to respective time bases respectively, wherein the linking information specifies correspondence information items, each between program clock reference (PCR) values of corresponding positions in the respective streams (10, 11, 15), the method comprising retrieving a program clock reference (PCR) value for the first position from the linking information, and searching for the first position on the basis of the retrieved program clock reference value.

4. A method of replaying according to Claim 3, wherein the linking information is contained in and retrieved from the file that contains the play stream (10, 11, 15).

5. A method of replaying according to Claim 4 wherein the correspondence information items are stored in at least one of the files for the normal play stream (10) and the trick play stream (11, 15), each at a position substantially where the clock reference (PCR) value of the item assumes the value corresponding to the item.

6. A method of replaying a video stream according to claim 2, wherein the method further comprises the step of successively displaying video information decoded from the play stream (10, 11, 12) and the new play stream (10, 11, 12) on a display device.

7. A video recording system, comprising

- an input terminal (3) for receiving a video stream;
- at least one randomly accessible storage device (4);
- a controller (2) arranged to
 - generate a normal play stream (10) and the trickplay stream (11, 15) from the received video stream, the trickplay stream (11, 15) by selecting and arranging frames from the received video stream, so that the trickplay stream (11, 15) represents, when played at a normal rate, the normal play stream (10) at a trickplay rate

- store the normal play stream (10) and trickplay stream (11, 15), as separately accessible files in the randomly accessible storage device (4) and
- generate linking information (12) which links positions of content within the normal play stream (10) to positions of corresponding content within the trickplay stream (11, 15).

8. A video recording system according to Claim 7, wherein the normal stream (10) and the trick play stream (11, 15) contain program clock references (PCR) for defining progress of time during play of the normal stream (10) and the trick play stream (11, 15) defined to respective time bases respectively, the controller (2) being arranged to store linking information specifying correspondence information items, each between program clock reference values of corresponding positions in the respective streams.

9. A video recording system according to Claim 7 wherein the correspondence information items are stored in at least one of the files for the normal play stream and the trick play stream, each at a position substantially where the clock reference value of the item assumes the value corresponding to the item.

10. A video replay system, comprising

- at least one randomly accessible storage device (4) for storing a normal play stream (10) data and a trickplay stream (11, 15) in separately accessible files, the trickplay stream (11, 15), when played at normal rate, representing the normal play stream (10) at a trickplay rate;
- a controller (2) arranged to
- replay a part of a play stream (10, 11, 15) from one of the files in the at least one randomly accessible storage device (4);
- receive a switch signal during replay of the part of the play stream (10, 11, 15), the switch signal for selecting a new play mode;
- read the linking information which links positions of content within the normal play stream (10) to positions of corresponding content within the trickplay stream (11, 15);
- determine a first position in the file for the new play mode, the first position corresponding, according to the linking information, to a second position in the part of the play stream that is replayed substantially at the time on which the switch signal is received;

- continue replay with new play stream data from the file corresponding to the new play mode, starting with data determined by the first position.

11. A randomly accessible memory medium (4) comprising

- separate files that contain data representing a normal play stream (10) and a trickplay stream (11, 15) respectively, the trickplay stream (11, 15), when played at a normal rate, representing the normal play stream (10) at a trickplay rate, and
- linking information (12), which links positions of content within the normal play stream (10) to positions of corresponding content within the trickplay stream (11, 15).

10

12. A randomly accessible memory medium according to Claim 11, wherein the linking information comprises successive instalments of for successive parts of the streams (10, 11, 15) as tables in the streams (10, 11, 15).

- 13. A video play stream signal comprising successive instalments of linking information (12), which links positions of content within a normal play stream (10) to positions of corresponding content within one or more different trickplay versions (11, 15) of the video play stream.

15